

# West Valley Demonstration Project U.S. Department of Energy

---

EPA ID Number: NYD980779540

## **Other (Former) Names of Site**

Nuclear Fuels Service (NFS)

## **Site Description**

West Valley Demonstration Project U.S. Department of Energy is located at 10282 Rock Spring Road in Ashford, New York. This is a 200-acre, Department of Energy (DOE)-operated portion of a 3,300-acre site owned by the New York State Energy Research & Development Authority (see also the fact sheet on Western NY Nuclear Service Center). From 1966 to 1972, the plant operated as a commercial nuclear fuels recycling facility. In 1980, Congress passed a law, called the West Valley Demonstration Project Act (WVDP), authorizing DOE to use this site to demonstrate a method for solidifying 600,000 gallons of high-level liquid waste.

## **Site Responsibility and Legal Instrument**

RCRA 3008(h) Order on Consent (Docket No. II, RCRA 3008(h)-92-0202) issued in 1992 jointly by New York State Department of Environmental Conservation (NYSDEC) and USEPA.

## **Permit Status**

Facility has Resource Conservation and Recovery Act (RCRA) Interim Status pursuant to State of New York (6 NYCRR) Part 373 Standards for Owners and Operators of Hazardous Waste Facilities. On July 16, 2003, a Part 373 permit application was requested by the State Department of Environmental Conservation, to be submitted no later than January 31, 2004.

## **Potential Threats and Contaminants**

In addition to the radiological threat, many chemicals were associated with the reprocessing of nuclear fuels. These include metals, as well as volatile and semi-volatile organic compounds. Used equipment, protective clothing, contaminated soils, and other associated waste have been buried on-site. An investigation has indicated low-level subsurface soil and groundwater contamination at two units at the facility: the construction and demolition debris landfill (CDDL) (contaminants are 1,1-dichloroethane and 1,1,1-trichloroethane) and the NRC-licensed disposal area (NDA) (contaminants are tributyl phosphate and n-dodecane).

## **Cleanup Approach and Progress**

All RCRA Facility Investigation (RFI) reports have been finalized and approved. There are two areas of concern, the NRC-licensed disposal area (NDA) and the demolition debris landfill (CDDL), mentioned in the section above. All identified solid waste management units in which there has been a release, or a potential release, of hazardous constituents are under continuous monitoring. As an interim corrective measure (ICM), an interceptor trench was built in 1991, close to the NDA, to collect and monitor any contamination that might move via the groundwater. To date, no hazardous contaminants have been detected at the interceptor trench. Groundwater monitoring in several other areas of the site has shown contaminant levels to be slightly elevated above the New York State standards, but these levels are still very low and not feasibly treated by further ICMs at this time. The liquid, high-level radioactive waste has been solidified in glass form (vitrified) and is being temporarily stored on-site in stainless steel canisters within a concrete vault until it can be shipped to an off-site repository, and the vitrification units are scheduled for closure. The West Valley Demonstration Project Act (WVDP) continues to decontaminate the main process plant. Although several rooms within this area cannot be accessed due to high radioactivity levels, these areas are currently stabilized and final corrective measures are being evaluated for all areas of concern as part of two on-going environmental impact statements (EISs). The first EIS (Decontamination and Waste Management) was issued in draft form in the summer of 2003 with a Record of Decision (ROD) scheduled for issuance in 2004. The second EIS (Site Decommissioning) is anticipated to be finalized at the end of 2005 with a ROD issued in early 2006.

## **Site Repository**

NYSDEC  
Division of Solid & Hazardous Materials  
625 Broadway, 8<sup>th</sup> Floor  
Albany, New York 12233-7252

and

NYSDEC  
Region 9 Office  
270 Michigan Avenue  
Buffalo, NY 14203-2999